What is claimed is:

1. A system for bending a workpiece having a marking at a predetermined location thereon, comprising:

a male die having a substantially v-shaped end portion;

a female die having a substantially v-shaped groove formed therein; and

a sensor mounted on one of the male and female dies and being responsive to the marking when the marking is located at a predetermined position in relation to the sensor.

2. The system of claim 1, wherein the one of the male and female dies has a bore formed therein and the sensor is mounted in the bore.

3. The system of claim 1, wherein the sensor is mounted in the female die.

4. The system of claim 1, wherein the sensor is an optical sensor.

5. The system of claim 4, wherein the sensor is adapted to respond to the marking when the sensor and the marking are in optical communication.

6. The system of claim 4, wherein the sensor is a photoreflector comprising a light-emitting diode and a light receiving region.

7. The system of claim 1, wherein the system comprises not more than one of the sensors.

8. The system of claim 3, wherein the groove is defined by a first surface substantially perpendicular to a centerline of the female die, a second surface adjoining a first end of the first surface and being inclined with respect the first surface, and a third surface adjoining a second end of the first surface and being inclined with respect the first surface.

9. The system of claim 8, wherein the female die has a bore formed therein, the bore extends from the first surface and is substantially parallel to the centerline of the female die, and the sensor is mounted in the bore so that an end of the sensor is substantially flush with the first surface.

10. The system of claim 9, wherein the sensor is responsive to the marking when the marking is positioned adjacent the groove and the marking is substantially aligned with the centerline of the female die.

11. The system of claim 10, wherein an output of the sensor has a first magnitude when the marking is positioned adjacent the groove and is substantially aligned with the centerline of the female die, and the output of the sensor has a second magnitude when locations on the workpiece other than the predetermined location are positioned adjacent the groove and are substantially aligned with the centerline of the female die.

12. The die set of claim 1, wherein the sensor generates an output and the sensor responds to the marking by increasing a magnitude of the output.

13. A die set for bending a workpiece having a reflective marking at a predetermined location on a surface thereof, comprising:

a male die having a substantially v-shaped end portion;

a female die having a substantially v-shaped groove formed in an end thereof and a bore extending inwardly from the v-shaped groove; and

an optical sensor mounted in the bore and being adapted to generate a predetermined output when the sensor is in optical communication with the reflective marking.

14. The die set of claim 13, wherein the sensor is a photoreflector comprising a light-emitting diode and a light receiving region.

15. The die set of claim 13, wherein the groove is defined by a first surface substantially perpendicular to a centerline of the female die, a second surface adjoining a first end of the first surface and being inclined with respect the first surface, and a third surface adjoining a second end of the first surface and being inclined with respect the first surface.

16. The die set of claim 15, wherein the sensor is mounted in the bore so that an end of the sensor is substantially flush with the first surface.

17. A die set for bending a workpiece at a predetermined location thereon designated by a surface marking, comprising:

a male die having a substantially v-shaped end portion;

a female die having a groove formed in an end portion thereof, the groove being adapted to at least partially receive the end portion of the male die and being substantially centered about a centerline of the female die; and

a sensor mounted in the female die and being substantially aligned with the centerline of the female die, the position sensor being adapted to respond to the surface marking when the surface marking is substantially aligned with the centerline of the female die.

18. The die set of claim 17, wherein the groove is defined by a first surface substantially perpendicular to the centerline of the female die, a second surface adjoining a first end of the first surface and being inclined with respect the first surface, and a third surface adjoining a second end of the first surface and being inclined with respect the first surface.

19. The die set of claim 18, wherein the sensor is mounted in the bore so that an end of the sensor is substantially flush with the first surface.

20. The die set of claim 17, wherein the sensor generates an output and the sensor responds to the surface marking by increasing a magnitude of the output.

21. A die set for bending a workpiece at a predetermined bending location marked with a material having a higher reflectivity than a surface of the workpiece, comprising:

a male die having a substantially v-shaped end portion;

a female die having a substantially v-shaped groove formed in an end thereof; and

an optical sensor mounted on one of the male and female dies, wherein the optical sensor is adapted to generate an output having a first magnitude when the optical sensor is in optical communication with the material, and the optical sensor is adapted to generate an output having a second magnitude when the optical sensor is in optical communication with the surface of the workpiece.

22. The die set of claim 21, wherein the first magnitude is greater than the second magnitude.

23. The die set of claim 21, wherein the optical sensor is a photoreflector comprising a light-emitting diode and a light receiving region.

24. A method for bending a workpiece at a predetermined bending location, comprising:

placing the workpiece on a brake press;

moving a die set of the brake press until the predetermined bending location is positioned between a male and a female die of the die set; and

punching the workpiece with the male die to form a bend therein.

25. The method of claim 24, further comprising:

placing a marking at the predetermined bending location; and

determining when the predetermined bending location is positioned between the male and female dies by measuring a response of a sensor mounted on one of the male and female dies and responsive to the marking.

26. The method of claim 25, wherein moving a die set of the brake press until the predetermined bending location is positioned between a male and a female die of the die set comprises moving the die set until a centerline of at least one of the male and female dies is substantially aligned with the marking.

27. The method of claim 24, wherein measuring a response of a sensor mounted on one of the male and female dies and responsive to the marking comprises measuring a response of a sensor mounted on female die.

28. A method for bending a workpiece at a predetermined location thereon designated by a surface marking, comprising:

placing the workpiece in a brake press having a die set mounted thereon;

moving one of the die set and the workpiece in relation to the other of the die set and the workpiece;

locating the predetermined location using a sensor mounted on the die set and responsive to the surface marking;

stopping movement of the one of the die set and the workpiece when the die set is substantially aligned with the predetermined location; and

punching a bend in the workpiece using a male die of the die set.

29. The method of claim 28, wherein moving one of the die set and the workpiece in relation to the other of the die set and the workpiece comprises moving the die set in relation to the workpiece.

30. The method of claim 28, wherein locating the predetermined location using a sensor mounted on the die set and responsive to the surface marking comprises scanning a surface of the workpiece for the surface marking using the sensor.

31. The method of claim 28, further comprising placing the surface marking on the workpiece.

32. The method of claim 28, wherein locating the predetermined location using a sensor mounted on the die set and responsive to the surface marking comprises using an optical sensor mounted on the die set and responsive to the surface marking when the optical sensor is in optical communication with the surface marking.

33. The method of claim 28, wherein locating the predetermined location using a sensor mounted on the die set and responsive to the surface marking comprises locating the predetermined location using a sensor mounted on a female die of the die set.